UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/053,832	04/01/1998	WILLIAM M. OWENS	28.733	1786

7590 03/22/2007

Ben Hauptman
1700 Diagonal Road
Suite 300
Alexandria, VA 22314

EXAMINER	
ASHLEY, BOYER DOLINGER	
ART UNIT	**PAPER NUMBER**
3724	

MAIL DATE	DELIVERY MODE
03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

Bd of Appeals

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM M. OWENS

Appeal No. 2006-0887
Application No. 09/053,832
Technology Center 3700

ON BRIEF

Before FRANKFORT, CRAWFORD and BAHR, *Administrative Patent Judges.*

BAHR, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on appeal from the examiner's rejection of claims 15-32. Claims 1-8 and 14 have been canceled and claims 9-13 stand withdrawn from consideration under 37 CFR § 1.142(b).

We AFFIRM-IN-PART.

BACKGROUND

The appellant's invention relates to a mechanism to move wooden boards containing defects through trimmer saws to yield useable boards (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

The examiner relies upon the following as evidence of unpatentability:

Zimmerman	4,009,741	Mar. 1, 1977
Conrad	4,449,958	May 22, 1984
Baranski	4,681,005	Jul. 21, 1987
Chambers	5,637,068	Jun. 10, 1997

The following rejections are before us for review.

Claims 15, 18-22 and 25-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chambers in view of Conrad and Baranski.

Claims 16, 17, 23, and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chambers in view of Conrad and Baranski and further in view of Zimmerman.

Rather than reiterate in their entirety the conflicting viewpoints advanced by the examiner and the appellant regarding this appeal, we make reference to the examiner's answer (mailed October 29, 2003) for the examiner's complete reasoning in support of the rejections and to the appellant's brief (filed August 7, 2003) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the following determinations.

We turn our attention first to the rejection of independent claim 15 as being unpatentable over Chambers in view of Conrad and Baranski. Chambers discloses a saw machine comprising an input conveyor 10 and an output conveyor 20 disposed in series for carrying billets 12 and a gang saw assembly 18 disposed between the input conveyor 10 and output conveyor 20. Chambers, which is particularly concerned with a method and apparatus for changing the saw assembly, does not discuss the details of the conveyors 10, 20 but does illustrate them in Figure 1 as two endless conveyors. The endless belt element of conveyor 10 is trained around an output-side pulley and the endless band element of conveyor 20 is trained around an input-side pulley. Although neither an input-side pulley on the input conveyor 10 nor an output-side pulley on the output conveyor 20 is illustrated in Figure 1[1], the examiner finds that "it appears that [such] an arrangement is inherent" (answer, p. 3). Regardless of whether such an arrangement is in fact inherent, we find that one of ordinary skill in the art of material handling and conveying would have immediately envisaged an arrangement wherein the endless

[1] The input and output ends of the input and output conveyors, respectively, are not illustrated in Figure 1.

belt element of each of the input conveyor 10 and the output conveyor 20 is trained about an input-side pulley and an output-side pulley, as this is the conventional arrangement for an endless belt conveyor, as exemplified by Conrad (Figure 1). Accordingly, the recitation of input-side and output-side pulleys on each of the input and output conveyors does not patentably distinguish appellant's claim 15 over the saw machine of Chambers.

The examiner also concedes that Chambers lacks the grooves in the pulleys and the guiding strip on the lower opposing surface of each of the endless belts. We acknowledge the examiner's statement in the first paragraph on page 4 of the answer that belts with notch grips are disclosed as commercially available belts in appellant's specification (p. 3, ll. 14-27), but are uncertain precisely which "feature" is rendered obvious "[f]or this reason alone" (answer, p. 4). We thus turn our attention to the examiner's "alternative" position, relying on the additional teachings of Conrad and Baranski, set forth on pages 4 and 5 of the answer.

The provision of a ridge 156 on the roller-engaging side of a continuous belt 80 aligned with continuously circumferentially-extending channels 122, 124 in the rollers 126, 128 around which the belt is trained, and a pair of wear strips 114 defining a channel 120 also aligned with both the ridge 156 and channels 122, 124, to keep the belt from shifting in the axial direction along the rollers was well known in the art at the time of the appellant's invention, as evidenced by Baranski (see Figures 4 and 5 and col. 4, ll. 30-68). While it is true that the endless belt and support structure arrangement disclosed by Baranski is embodied in a rotatable

fence 42 rather than in a load-carrying belt conveyor,[2] the benefit of lateral (i.e., normal to the direction of travel and parallel to the axes of rotation of the pulleys or rollers) alignment and tracking is just as applicable in a load-carrying endless conveyor and would have been appreciated as such by one of ordinary skill in the art, as evidenced by the teaching by Conrad of providing projections on the surface of a load-carrying conveyor belt 26 opposite the load-carrying surface for engagement in grooves 24 of pulley 12 to "cause belt [26] to be kept in a central position on pulley 12 despite variations in side-loadings in the belt 26" (col. 3, ll. 27-29). We therefore find no error in the examiner's determination that it would have been obvious, in view of the combined teachings of Conrad and Baranski, to provide a ridge or strip, such as ridge 156 taught by Baranski, on the lower opposing surface of the belt of each of the input conveyor 10 and output conveyor 20 of Chambers aligned with a groove or channel in the pulleys and a channel defined in a support surface between the pulleys of the input and output conveyors to keep the belts centrally positioned on the pulleys.

In light of the above, the rejection of claim 15 as being unpatentable over Chambers in view of Conrad and Baranski is sustained. The appellant has not argued separately the patentability of claims 18, 22, 25-27 and 31 apart from claim 15, allowing them to stand or fall with representative claim 15 (see In re Young, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); In re Wood, 582 F.2d

[2] Although the load (wood) is supported by spiked rollers 44 rather than by Baranski's fence 42, the rotation of belt 80 of fence 42 forces the wood being split toward the exit 16 when the resaw 2 is in use (col. 3, ll. 37-40).

638, 642, 199 USPQ 137, 140 (CCPA 1978)). Accordingly, the like rejection of claims 18, 22, 25-27 and 31 is also sustained. We shall also sustain the rejection of dependent claims 16, 23 and 24 as being unpatentable over Chambers in view of Conrad and Baranski and further in view of Zimmerman since the appellant has not challenged such with any reasonable specificity (*see In re Nielson*, 816 F.2d 1567, 1572, 2USPQ2d 1525, 1528 (Fed. Cir. 1987)), choosing instead to rely solely on the arguments presented with respect to claim 15 (brief, p. 13), which we do not find persuasive, as discussed above.

The rejection of claims 19-21 as being unpatentable over Chambers in view of Conrad and Baranski is not sustained. None of the applied prior art would have taught or suggested providing on the lower opposing surface of the belt a strip having a plurality of V-shaped notches as defined in claim 19. One skilled in the art possessed with the knowledge of the teachings of Chambers, Conrad and Baranski would have been led to provide either a continuous strip (ridge 156) as taught by Baranski or a plurality of projections 34 as taught by Chambers extending from the lower opposing surface of the belts, neither of which would result in the strip structure defined in claim 19, as well as claims 20 and 21 depending therefrom.

With respect to claim 28, which depends from claim 15 and further recites a work bed disposed immediately beneath a portion of the endless belt for bearing at least a partial weight of said material, the appellant (brief, p. 12) argues that, in a horizontally-disposed belt as in Chambers, wear strips 114, as well as ridge 156,

become redundant and that, consequently, a person of ordinary skill in the art would not have been motivated to additionally provide Chambers with such a work bed. As we explained above, the channel 120 defined between the wear strips 114 of Baranski provides lateral centering of the belt, by engagement of belt ridge 156 therewith, between the pulleys. One skilled in the art would have appreciated that such centering is just as desirable in a horizontally-disposed belt arrangement to counteract variations in side-loadings in the belt, which are recognized in the art as an issue even in horizontally-disposed conveyor belts, as exemplified by Conrad (col. 3, ll. 27-29). Accordingly, we find no error in the examiner's determination that the provision of a work bed provided with a groove aligned with the pulley grooves for engaging the ridge or strip of the belt of Chambers would have been obvious in order to provide lateral tracking or centering of the endless belt in the region between the pulleys. The rejection of claim 28, as well as claims 29 and 30 which appellant has not argued separately apart from claim 28, as being unpatentable over Chambers in view of Conrad and Baranski, is sustained.

We shall not sustain the rejection of claim 32 as being unpatentable over Chambers in view of Conrad and Baranski. Claim 32 recites that the steps of carrying the material toward and away from the processing unit are performed without positive lateral edge contact of the material with the apparatus. The appellant (brief, p. 12) argues that this feature is not taught or suggested in the applied prior art and the examiner has not pointed out where such a teaching or suggestion may be found in the references.

Claim 17 depends from claim 16 and further recites that the input-side pulley of the input conveyor and the output-side pulley of the output conveyor are *passively driven* by the output-side pulley of the input conveyor and the input-side pulley of the output conveyor via the endless belts. The examiner's reliance on Zimmerman for a teaching of such an arrangement is not well founded. Zimmerman is not directed to endless belt conveyors but, rather, discloses a woodworking machine wherein the wood is conveyed by feed rolls 36, 38, each of which is positively driven by rotation of shafts 40a, 40b, 40c, 40d, 40e and 40f, on which the feed rolls are fixedly mounted, by chain drives 46, 48, 50, 52, 54 and 56. It is not immediately apparent that a person of ordinary skill in the art would have looked to the feed roll drive arrangement of Zimmerman for suggestions as to a drive arrangement for endless conveyor belts. Even assuming that such a person would have looked to Zimmerman, the only suggestion one of ordinary skill in the art could have possibly gleaned from Zimmerman's drive arrangement would be to provide positive drive to each of the pulleys of the input and output conveyors. Such a drive arrangement would not meet the "passively driven" limitation of claim 17. It follows that the rejection of claim 17 as being unpatentable over Chambers in view of Conrad and Baranski and further in view of Zimmerman is not sustained.

CONCLUSION

To summarize, the rejection of claims 15, 18-22 and 25-32 as being unpatentable over Chambers in view of Conrad and Baranski is sustained as to

claims 15, 18, 22 and 25-31 and reversed as claims 19-21 and 32 and the rejection of claims 16, 17, 23 and 24 as being unpatentable over Chambers in view of Conrad, Baranski and Zimmerman is sustained as to claims 16, 23 and 24 and reversed as to claim 17.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a). *See* 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

CHARLES E. FRANKFORT)
Administrative Patent Judge)
)
)
)
)
MURRIEL E. CRAWFORD) BOARD OF PATENT
Administrative Patent Judge) APPEALS
) AND
) INTERFERENCES
)
)
JENNIFER D. BAHR)
Administrative Patent Judge)

William M. Owens
5716 North 33rd Street, Apt. 1
Tacoma, WA 98407

JDB/lg